## ABSTRACT

A color television receiver system processes color difference signals for providing tint control while maintaining uniform color amplitude with respect to changes in hue shift angle. The color difference signals are modified as a function of each other and as a function of a hue shift angle to produce modified color difference signals. A color difference signal [B-Y] is supplied as a first input to multipliers M1 and M3. Another color difference signal [R-Y] is supplied as a first input to another pair of multipliers M2 and M4. A control signal generator produces output signals sin $\theta$ and cos $\theta$ where $\theta$ is the hue shift angle. The sin $\theta$ signal is supplied as a second input to multipliers M1 and M4 while the cos $\theta$ signal is supplied as a second input to multipliers M2 and M3. The outputs of M1 and M2 are added in an adder Al to produce a modified output [R-Y]'. Similarly, the output of multiplier M3 is provided as a positive input to adder A2 whereas the output of multiplier M4 is provided as a negative input to adder A2 to produce a modified color difference signal [B-Y]'. The modified color difference signals [R-Y]' and [B-Y]' represent a color vector having an amplitude A that remains substantially constant over a relatively wide range of hue shift angles $\theta$.